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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/922,679	08/06/2001	James G. Sliney JR.	00CR165/KE	9985

7590 05/29/2003
Rockwell Collins, Inc.
Attention: Kyle Epele M/S 124-323
400 Collins Rd. NE
Cedar Rapids, IA 52498

EXAMINER

HUYNH, YENNHU B

ART UNIT	PAPER NUMBER
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2813

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DATE MAILED: 05/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/922,679

Applicant(s)

SLINEY, JAMES G. CH

Examiner

Yennhu B Huynh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art (APA) in view of Allen et al. (U.S. 6,111,696).

APA in pages 1-4 disclose LCD with mixed polarizer, which include:

-Re. claim 1: a luminaire; an iodine type input polarizer for polarizing light from the luminaire; a liquid crystal module for receiving polarized light from the iodine type input polarizer.

However, APA do not disclose a high temperature type output polarizer for receiving light from the liquid crystal module.

Allen et al. at figs. 1-16, in col. 1-60 disclose a brightness enhancement film, which include a high temperature up to 135 C degrees (col.53, Table 5, lines 49-65), or 154 C degrees (col.55, lines 55-60), type output polarizer for receiving light from the liquid crystal module.

It would have been obvious to one having skill in the art at the time the invention was made to modify the APA by incorporating a high temperature type output polarizer to provide optical performance without degradation.

APA also do not disclose wherein the input iodine and high temperature output polarized is a film polarizer (cls. 2,3,11 & 12); wherein the input iodine and output type polarizer contains an adhesive layer (cls. 4,5,13 & 14); and wherein the high temperature type output polarizer is a dye type polarizer (cls.9 & 18).

Allen et al. also disclose:

Re. claims 2,3, 11 & 12: wherein the input iodine and high temperature output polarized is a film polarizer (col.30, lines 44-65).

It would have been obvious to one having skill in the art at the time the invention was made to modify the APA by incorporating by the input iodine and high temperature output polarizer, to obtain a light resistance exposes for long period.

Re. claims 4,5,13 & 14: wherein the input iodine and output type polarizer contains an adhesive layer (col. 27 & 28, lines 47-14).

It would have been obvious to one having skill in the art at the time the invention was made to modify the APA by incorporating the input iodine and output type polarizer contains an adhesive layer for bonding polarizing elements stability to the LCD.

Re. claims 9 & 18: wherein the high temperature type output polarizer is a dye type polarizer (col. 30 & 31, lines 66-5)

It would have been obvious to one having skill in the art at the time the invention was made to modify the APA by incorporating high temperature dye type output polarizer to obtain a superior polarizing ability of maximum illuminance.

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APA also disclose:

-Re. claim 8: wherein the liquid crystal module is an active matrix liquid crystal module (p.1)

Re. 6 & 7: wherein input iodine and output type polarizer contains a protective layer (p.2).

-Re. claims 15 & 16: wherein input iodine and output type polarizer contains a protective layer (p.2).

-Re. claim 17: wherein the liquid crystal module is an active matrix liquid crystal module (p.1).

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art (APA) in view of Allen et al. (U.S. 6,111,696) and Osamu et al. (JP 6250174 A).

APA and Allen et al. disclose substantially all of claimed invention, except wherein the LDM having a front surface wherein the dye type output polarizer adjacent to and a rear surface and wherein the iodine type input polarizer adjacent to (cl.10).

Osamu et al. disclose a liquid crystal display unit, which include:

-Re. claim 10: liquid crystal display panel having a front surface wherein the dye type output polarizer adjacent to and a rear surface wherein the iodine type input polarizer adjacent to (Abstract).

It would have been obvious to one having skill in the art at the time the invention was made to modify the APA and Allen 's invention by incorporating adjacent the dye output polarizer to front and iodine input to rear surface, to obtain a capability of high performance because the temperature of the front is higher than at the rear.

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Pertinent Art

Toshihiro (JP 6230367 A) disclose a LCD device. The structure includes a luminaire source 4, liquid crystal panel 1 for display and panel 5 control, polarizing plate 6 for image display which is a dye stuff; and wherein the panel display plates having both sides. This reference is deemed to the current invention.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yennhu B. Huynh whose telephone number is 703-308-6110. The examiner can normally be reached on M-F 8.30AM-7.00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Whitehead, Jr., can be reached 703-308-4940. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

YNBH,

4/24/03


CARL WHITEHEAD, JR.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800